



MATERIAL SAFETY DATA SHEET

5/5/97

BAYER CORPORATION
PRODUCT SAFETY & REGULATORY AFFAIRS
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Pittsburgh, PA 15205-9741

TRANSPORTATION EMERGENCY
CALL CHEMTRAC: 800-424-9300
DISTRICT OF COLUMBIA: 202-483-7616

NON-TRANSPORTATION
BAYER EMERGENCY PHONE...: (412) 923-1800
BAYER INFORMATION PHONE.: (800) 662-2927

1. CHEMICAL PRODUCT IDENTIFICATION:

PRODUCT NAME.....: Dispercoll U 54
PRODUCT CODE.....: R290
CHEMICAL FAMILY....: Polyester-polyurethane aqueous dispersion
FORMULA.....: Not applicable--polymeric material
PRODUCT USE.....: Adhesive Raw Material - This product contains a component
that is subject to regulatory restrictions. See
Regulatory Information, Section 15 for details.

2. COMPOSITION/INFORMATION ON INGREDIENTS:

INGREDIENT NAME /CAS NUMBER EXPOSURE LIMITS CONCENTRATION (%)

***** HAZARDOUS INGREDIENTS *****

This product contains no hazardous ingredients as defined under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

***** OTHER INGREDIENTS *****

The following component is contained at levels below the OSHA disclosure requirements and is listed here for informational purposes only.

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INGREDIENT NAME
/CAS NUMBER

EXPOSURE LIMITS

CONCENTRATION (

The following component contains substances for which a Premanufacture Notice (PMN) has been filed with the US EPA. The PMN substances are contained in this product at less than 0.002% and are subject to regulatory restrictions. See Regulatory Information, Section 15 for details.

Biocide

OSHA : Not Established
ACGIH: Not Established

Less than 0.1 %

3. HAZARDS IDENTIFICATION:

* EMERGENCY OVERVIEW
*

- * CAUTION! Color: Milky white; Form: Liquid; Odor: Slight
- * smell of acetone; Irritating gases/fumes may be given off
- * during burning or thermal decomposition.

POTENTIAL HEALTH EFFECTS:

ROUTE(S) OF ENTRY.....

Inhalation; Skin Contact; Eye Contact

HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE:

ACUTE EFFECTS OF EXPOSURE..... Based on animal toxicity testing of a similar product, we would expect this product to be non-irritating to the eyes and skin and only moderately toxic through ingestion.

CHRONIC EFFECTS OF EXPOSURE... No applicable information has been established concerning any adverse health effects from chronic exposures to this product.

CARCINOGENICITY.....

The components of this product are not listed by NTP, IARC or regulated as a carcinogen by OSHA.

MEDICAL CONDITIONS

AGGRAVATED BY EXPOSURE.....

EXPOSURE LIMITS..... None Known

Not established for this product. During the course of normal drying procedures, residual acetone vapors may be released. Refer to the exposure limits for acetone.

4. FIRST AID MEASURES:

FIRST AID FOR EYES.....

Flush eyes with plenty of lukewarm water. See physician if irritation is present and persists.

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4. FIRST AID MEASURES (Continued)

FIRST AID FOR SKIN: Wash affected areas with soap and water. Remove contaminated clothing. Wash clothing before reuse. Contact a physician if irritation is present and persists.

FIRST AID FOR INHALATION: Remove to fresh air.

FIRST AID FOR INGESTION: Contact a physician.

5. FIRE FIGHTING MEASURES:

FLASH POINT: Not applicable (water based product), however, solid material will support combustion if water has been evaporated.

FLAMMABLE LIMITS:

UPPER EXPLOSIVE LIMIT (UEL) (%): Not Established

LOWER EXPLOSIVE LIMIT (LEL) (%): Not Established

AUTO-IGNITION TEMPERATURE: Not Applicable

EXTINGUISHING MEDIA: Water; Foam; Dry Chemical

SPECIAL FIRE FIGHTING PROCEDURES: Full emergency equipment with self-contained breathing apparatus should be worn by firefighters. During a fire irritating and toxic gases and aerosols may be generated by thermal decomposition and combustion if material ignites after water boils off. Dry residue will support combustion.

6. ACCIDENTAL RELEASE MEASURES:

SPILL OR LEAK PROCEDURES:

Keep out of sewer systems to prevent blockage due to polymer deposits. Cover spill with absorbent material (sand, sawdust) or precipitate latex with sodium chloride and remove polymer coagulate.

7. HANDLING AND STORAGE:

STORAGE TEMPERATURE (MIN/MAX): 41 F (5 C)/95 F (35 C)

SHELF LIFE: Not Established

SPECIAL SENSITIVITY: Heat and freezing temperatures.

HANDLING/STORAGE PRECAUTIONS: Material should be stored in a clean, dry environment in sealed containers. Keep away from foodstuffs.

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8. PERSONAL PROTECTION:

EYE PROTECTION REQUIREMENTS Safety goggles recommended.
 SKIN PROTECTION REQUIREMENTS Rubber gloves recommended.
 VENTILATION REQUIREMENTS Local exhaust at processing equipment.
 RESPIRATOR REQUIREMENTS If significant levels of residual solvent vapors are detected in the workplace, an appropriate NIOSH/MSHA approved respirator should be worn. This is particularly important during contain and pipe cleaning and repair or other enclosed operations.
 ADDITIONAL PROTECTIVE MEASURES Emergency eyewash stations and showers should be made available to all workers. Educate and train employees in the safe use and handling of this product.

9. PHYSICAL AND CHEMICAL PROPERTIES:

PHYSICAL FORM Liquid
 COLOR Milky white
 ODOR Slight smell of acetone
 ODOR THRESHOLD Not Established
 PH 5.5 - 7.5
 BOILING POINT Approx. 212 F (100 C) at 760 mmHg
 MELTING/FREEZING POINT Not Established (32 F (0 C) for water)
 VISCOSITY Below 1000 mPa.s
 SOLUBILITY IN WATER Miscible
 SOLUBILITY (NON AQUEOUS) Dimethylformamide, acetone
 SPECIFIC GRAVITY Approx. 1.07 at 73 F (23 C)
 BULK DENSITY Approx. 8.9 lbs/gal
 % VOLATILE BY VOLUME Not Established
 % VOLATILE BY WEIGHT Approx. 50 % (water)
 VAPOR PRESSURE Approx. 97.5 mmHg at 122 F (50 C)

10. STABILITY AND REACTIVITY:

STABILITY This is a stable material.
 HAZARDOUS POLYMERIZATION Will not occur.
 INCOMPATIBILITIES Acids and bases
 INSTABILITY CONDITIONS Avoid temperatures above 122 F (50 C) and below 32 F (0 C).
 DECOMPOSITION TEMPERATURE Not Established
 DECOMPOSITION PRODUCTS From dry residue in fire or overheat situations: CO, CO₂, hexamethylene diisocyanate, isophorone diisocyanate, traces HCN, others undetermined.

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11. TOXICOLOGICAL INFORMATION:

Toxicity data is based on test results of a similar product.

ACUTE TOXICITY

ORAL LD50.....

Greater than 2,000 mg/kg (Rat).*

EYE EFFECTS.....

Non-irritating to rabbit eyes.*

SKIN EFFECTS.....

Non-irritating to rabbit skin.*

* Tests conducted at the Institute for Toxicology, Bayer, Ag.

12. ECOLOGICAL INFORMATION:

AQUATIC TOXICITY.....

Brachydanio rerio (96 hr. test).* LC50: Greater than 100 mg/l - tested on

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD.....

Material may be incinerated or landfilled in compliance with federal, state, and local environmental control regulations.

14. TRANSPORTATION INFORMATION:

TECHNICAL SHIPPING NAME.....

FREIGHT CLASS BULK..... Polyester-Polyurethane Aqueous Dispersion

FREIGHT CLASS PACKAGE..... Not Applicable

PRODUCT LABEL..... Resin, Coal Tar or Petroleum

PRODUCT LABEL..... Dispercoll U 54

DOT (DOMESTIC SURFACE)

HAZARD CLASS OR DIVISION

..... Non-Regulated

IMO / IMDG CODE (OCEAN)

HAZARD CLASS DIVISION NUMBER..... Non-Regulated

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14. TRANSPORTATION INFORMATION (Continued)

IMO / IMDG CODE (continued)

ICAO / IATA (AIR)

HAZARD CLASS DIVISION NUMBER...: Non-Regulated

15. REGULATORY INFORMATION:

OSHA STATUS.....: This product is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200. However, thermal processing and decomposition fumes from this product may be hazardous as noted in Section 3.

TSCA STATUS.....: On TSCA Inventory; This product contains a component that is subject to 40 CFR 721.80(f), 721.90(a)(4), (b)(4), (c)(4) (where n=10), and 721.125(a)(b)(c)(i)(k).

For additional assistance, contact Bayer Corporation Regulatory Affairs.

CERCLA REPORTABLE QUANTITY...: None

SARA TITLE III:

SECTION 302 EXTREMELY

HAZARDOUS SUBSTANCES...: None

SECTION 311/312

HAZARD CATEGORIES....: Non-hazardous under Section 311/312

SECTION 313

TOXIC CHEMICALS.....: None

RCRA STATUS.....: If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

COMPONENT NAME

/CAS NUMBER

CONCENTRATION

STATE CODE

Polyester Polyurethane
, 153640-62-1

Approx. 50 % PA3, NJ4

Water
7732-18-5

Approx. 50 % PA3, NJ4

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15. REGULATORY INFORMATION (Continued)

COMPONENT NAME /CAS NUMBER	CONCENTRATION	STATE CODE
Acetone 67-64-1	Less than 1 %	NJ3

NJ3 = New Jersey Special Health Hazardous Substance List

NJ4 = New Jersey Other - included in 5 predominant ingredients > 1%

PA3 = Pennsylvania Non-hazardous present at 3% or greater.

CALIFORNIA PROPOSITION 65

To the best of our knowledge, this product contains no levels of listed substances, which the state of California has found to cause cancer, birth defects or other reproductive effects.

MASSACHUSETTS SUBSTANCE LIST (MSL)

Hazardous Substances and Extraordinarily Hazardous Substances on the MSL must be identified when present in products. To the best of our knowledge, this product contains no substances at a level which could require reporting under the statute.

16. OTHER INFORMATION:

HMIS RATINGS:

	Health	Flammability	Reactivity
	1	1	1
0=Minimal	1=Slight	2=Moderate	3=Serious
			4=Severe

Bayer's method of hazard communication is comprised of Product Labels and Material Safety Data Sheets. HMIS ratings are provided by Bayer as a customer service.

REASON FOR ISSUE.....: Establish product code.

PREPARED BY.....: James M. Ferguson

APPROVED BY.....: J. H. Chapman

APPROVAL DATE.....: 05/05/97

SUPERSEDES DATE.....: None

MSDS NUMBER.....: 29975

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